Before the
Federal Communications Commission
Washington, D.C. 20554

In the matter of	)	
IP-Enabled Services	)	WC Docket No. 04-36
	)	

INITIAL COMMENTS OF THE MONTANA PUBLIC SERVICE COMMISSION

Background and Introduction

In its Notice of Proposed Rulemaking (NPRM) the FCC asked for comment on issues relating to services and applications utilizing Internet Protocol (IP), collectively referred as "IP-enabled services" (IP-telephony or IP in the following).[1] These services include, but are not limited to, voice over IP (VoIP) services, other communications capabilities utilizing the Internet Protocol, software-based applications that facilitate use of those services, and future services using IP expected to emerge in the market.

The Montana Public Service Commission (MPSC) embraces the innovations that will emerge with IP telephony and seeks to improve upon the present universal service achievements. The states and the FCC have their work cut out in terms of integrating IP telephony onto the existing networks. The universal service achievements to date should not backslide, intentionally or unintentionally, as the nation's communication systems transition to and increasingly rely upon IP. We must work to ensure that the principle goals in Section 254 will be met.

Of significant concern to the MPSC is that the network be maintained, advanced and paid for. Absent deliberate policies that ensure cost recovery for the network incumbent local exchange carriers may face stranded costs. The FCC shares this overarching policy concern, as evident from the following:

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[1] In the Matter of IP-enabled Services. WC Docket No. 04-36 (FCC 04-28). Released March 10, 2004.

> *"As a policy matter we believe that any service provider that sends traffic to the PSTN should be subject to similar compensation obligations, irrespective of whether the traffic originates on the PSTN, on an IP network, or on a cable network. We maintain that the cost of the PSTN should be borne equitably among those that use it in similar ways"* (NPRM, ¶33)

Topics and Comments

Rate of Substitution. (¶ ¶ 1-4). The MPSC does not have statistics on the emergence and penetration of IP services but we expect the penetration in Montana to be low. Although IP-enabled services will be offered over alternative platforms (cable, wireless, satellite etc.,) our comments focus on the offering of such services over the public switched telephone network (PSTN).

Whether or not IP-enabled services substitute for traditional services involves both technical and economic considerations; our comments focus on the technical perspective. Pulver and Vonage appear to provide services that are technical substitutes for one or another traditional telecommunications service. Pulver's service may be more of a private line substitute while Vonage like service may be a clear technical substitute for basic exchange service. We acknowledge that IP will improve the efficiency and functionality of the network infrastructure.

The statistics we have suggest that wireless is to date largely a complement and not a substitute for basic local exchange service. This evidence is buttressed by a recent economic analysis of the substitution of wireless for wireline service.[2] Given the state of the market and the absence of economic data it would be premature to reach any firm conclusion on whether IP-enabled services substitute economically for basic exchange service. Wireless is not yet, however, a substitute for access to basic local exchange service.[3]

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[2] Phoenix Center Policy Bulletin No. 10. March 31, 2004. "Fixed-Mobile 'Intermodal' Competition In Telecommunications: Fact or Fiction?" Also see the February 21, 2003 New York Times article by Simon Romero: "Land-Line Rules in a Wireless World.

[3] This is not to mean that wireless cannot substitute quickly for long distance service. Wireless services are clearly a substitute for toll service.

Categorization. (¶¶ 35, 37). Regardless of how the FCC's rules end up regulating the various network layers, that the MPSC will continue to fulfill its obligation to economically regulate those carriers that the Montana Legislature requires the MPSC to regulate.[4] That said, the NPRM's description of service layers is useful.

In terms of functionality, IP-enabled services have similarities with basic exchange services. As such, certain IP-enabled services (e.g.,Vonage) depend upon a robust broad band deployment.[5] For one, Vonage like services ride over parts of the public switched telephone network (PSTN) and use numbering resources as would a traditional telephone service. In the case of traditional land line service, absent loop plant, Vonage-like services cannot be transmitted to and from subscribers. Just as traditional circuit switched basic exchange services depend upon central office power redundancy (battery power backup) Vonage-like services are similarly dependent. However, unlike traditional circuit switched basic exchange services Vonage-like services appear also to be dependent upon the reliability of electric power (e.g., personal computers are powered by the electric system and not the low voltage supply that feeds traditional circuit switched customer premise equipment).

Until such time as traditional circuit switched service is entirely replaced, each Vonage-like service may have to terminate to a circuit switched landline phone number; and, in turn, Vonage-like services must terminate calls that originate from circuit-switched landline phone numbers. Therefore, Vonage-like services involve communications that traverse and use the PSTN.

Jurisdictional Considerations. (¶¶ 38-41).

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[4] Every public utility is required to furnish reasonably adequate service and facilities and any charge shall be just and reasonable. (§69-3-802 M.C.A.)

[5] There may be co-dependency if the provider of the network facilities layer and the applications or protocol layers are one in the same. In turn, the MPSC has concern with how such an entity may use its control over the network layer with its marketing of the protocol layer, a point on which we comment later. The MPSC would add, however, that the economic analysis here ought to be supple, largely because of the internalized complementarities that may be present with vertical integration. (That is, there must be consideration of both the market structure with consideration of the transactions cost implications.)

The authority of states to enforce local service policies should be preserved. The authority of state commissions to review interconnection agreements for compliance with the public interest in the state should be retained. In Montana, for example, the build-out and meet point requirements in interconnection agreements between Qwest and competing carriers had important public interest ramifications that the Commission was able to address through review of Qwest's interconnection agreements. This authority should be reserved to State Commissions.

Using specific public interest criteria to categorize a service being offered and thereby attaching specific rights and responsibilities to that service would allow a state commission to enforce and apply those criteria to ensure that specific issues raised by an intrastate market are addressed. States do have differing policy and public interest obligations and approaches, and States should be allowed to pursue those differing public policy approaches in regulating communications services and providers without reference to how the entity or service is classified.

The MPSC recommends developing a list of functional and operational criteria for determining the public interest areas that would justify the appropriate regulatory approaches.

Appropriate Legal and Regulatory Framework. (¶¶ 42-70).

Distinguishing between applications that resemble "telecommunications services" and those that qualify under the current regime as "information services" has become increasingly legalistic, impractical and unenforceable. IP enabled voice communication services meeting certain criteria should be classified as "telecommunications services" for limited purposes, and forbearance of Title II regulation may be appropriate regarding those services. The criteria applied to determine the appropriate classification should be factors that fall within the public interest scheme; that is, those criteria that evaluate primarily the service being offered rather than the technology through which it is offered, should control the classification of the service as "information" or "telecommunications."

Regulation of IP-enabled services should be technology neutral. The Montana Commission urges an approach that recognizes the competitive nature of the entire communications arena, but that accounts for the need to provide services to rural areas in

a comparable manner to those provided in urban areas. Entities providing similar services should be treated similarly, regardless of technology. However, the FCC should account for and assist those entities providing IP enabled services in rural areas where appropriate in order to ensure that those services continue to be available to rural customers.

The interconnection requirements of the Act should be made applicable to all entities regardless of the classification of the service that is provided. Interconnection of networks is critical to competition and reduced regulation and should be available to all entities providing communications services as a way to promote more competition in the communications world.

Specific Regulatory Requirements: Public Safety Access 911/E911. (¶¶ 50-57). Any IP-enabled service that traverses portions of the PSTN and that relies upon both low-voltage power from the central office for communications and electric power for the terminal adaptor poses public safety concerns. In addition, there are universal service implications pursuant to Section 254(c) of the Telecommunications Act of 1996.

Vonage-like services that are dependent upon the reliability of electric power will arguably have increased outage probability, vis-a-vis traditional land line phone service. In turn, the ability to provide 911 access will be impeded. At the same time, and because of battery backup, plain old telephone service will continue to provide emergency services. This difference, in and of itself, is a public safety concern.

The Commission also questions the potential for IP-enabled service to provide a cost effective alternative to 911 trunking (¶53). However, resolution of this concern could be informed by analyzing the simultaneous usage of trunking/transport facilities that will carry packet-switched 911 calls. If anything, a good argument could be made for redundancy in the trunking/transport facilities used for emergency services. The underlying trunking/transport facilities (layer) ought also to be a federally supported universal service.

Specific Regulatory Requirements: Carrier Compensation. (¶¶ 61-62). Our concerns with carrier compensation regard the economic health of incumbent local exchange

companies (ILECs) that serve Montana's rural areas. We also have concerns about competitive neutrality. We firmly believe that IP-enabled services that rely on the PSTN should incur appropriate carrier access charge fees.

Access charges vary by the type of service provided and whether the service is intrastate or interstate. We have information about two kinds of carrier access service that the state's only non-rural carrier (Qwest) provides. First, most all special access in Montana is provided pursuant to FCC regulations and rates. Qwest receives about $23.5 million dollars annually almost all of which is from FCC approved prices that provide Qwest with implicit subsidies.[6] These services are nearly exclusively provided to CLECs and IXCs. Second, Qwest's intrastate network access revenues (carrier access) amount to over $20 million dollars per year.[7] Therefore, as the IP-enabled service providers, such as Pulver and Vonage, make inroads into Montana's telecommunications markets there will likely result a loss of millions of dollars in access revenues for Qwest alone. Because of their greater dependence upon access charge revenues Montana's rural ILECs may suffer relatively greater revenue loss. In turn, there will be economic consequences for the availability of affordable universal service in Montana.

We have concern about appropriate intercarrier compensation for that IP-enabled service traffic that uses the PSTN. If 251(b) interconnection is not applicable for traffic that transits between IP-enabled service users and traditional circuit switched networks, the remaining choice is an appropriate carrier access fee. In turn, jurisdictional separations issues will emerge if the traffic's nature is uncertain. Solutions here may require a safe harbor designation for interstate traffic.

Specific Regulatory Requirements: Universal Service. (¶¶ 63-66). The nation's primary telecommunications policy is to make communications services available "so far as

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[6] Montana Public Service Commission. Final Order. IN THE MATTER Of Establishing Cost-Based Wholesale Prices for the Remainder of Qwest's Network Elements UTILITY DIVISION. DOCKET NO. D2002.7.87. ORDER NO. 6435(b). January 26, 2004. Findings of Fact 107-109.

[7] Montana Annual Report of Qwest Corporation, Year 2002. March 15, 2004 Restatement. Schedule 7.

possible, to all the people of the United States." (Title I, Sec. 1.; *also* Section 254 of the Telecommunications Act of 1996). The Montana legislature has also declared that it remains the policy of the state of Montana to maintain universal availability of basic telecommunications service at affordable rates; the encouragement of competition is of secondary importance. (§69-3-201 M.C.A.)

The FCC and the Federal State Joint Board on Universal Service (USF JB) will be challenged to stay abreast of the implications that IP services pose for the federal universal service fund. The FCC's inquiry into how the classification of IP-enabled services would affect the funding of universal service is a clear candidate for referral to the USF JB. Such a referral would permit a more focused and deliberate inquiry into the implications that IP poses for federal universal service policy. Such a referral would also be more consistent with Section 254.

IP-enabled services, depending on how they are regulated, may threaten the provision of universal service. There are, however, as stated above, good things that may result from the adoption of IP. First, it is not clear that contributions in support of the federal universal service will be required of IP-enabled services. Second, it is not clear that providers of IP-enabled services will pay access charges for services that touch or use the PSTN. The loss of access charge revenue is not speculative given Qwest's recent decision to not assess access charges for "true VOIP calls and availability of new local services to VOIP providers."[8] In turn, "bill and keep" could be the outcome of not assessing carrier access fees of certain IP-enabled services. Third, as for the benefits of IP-telephony there are three main types. One is improved network efficiencies. A second is the evolution of a smorgasbord of rich and flexible services for consumers. A third benefit is the potential for enhanced marketplace competition at the applications layer.

If IP-enabled calls that originate on an ILEC's system terminate as a circuit switched call on the network of another Montana ILEC's system, the originating ILEC must compensate the terminating carrier for such a call, regardless of whether the originating ILEC itself or another IP-enabled service provider's customer originates the

[8] Qwest Press Release, Denver, April 26, 2004. Qwest defines "True VOIP" as a service that is offered over a cable or DSL broadband connection such as Qwest's "stand-alone DSL" offering.

call. Although the apparent implication involves intercarrier compensation (economic rate regulation), we note here that such compensation should be consistent with how calls that originate on traditional circuit switched networks are then terminated.

Universal service is an evolving level of telecommunications services that the FCC must periodically update to take into account for advances in telecommunications and information technology and services. Due to policy changes and the natural evolution of markets it is likely that broadband access should eventually be added to those existing federally supported services.[9] At the same time, IP-enabled telephony will erode the traditional basis of support. The impact of adding broadband to the list of supported services, combined with reduced carrier access cost recovery, has the potential for a train wreck, a wreck that could and should be avoided.

Other Regulatory Requirements: Economic Regulation. (¶¶ 73-74).

The MPSC does not believe that it is wise public policy to use IP-enabled services as a vehicle to absolve incumbent carriers of economic regulation. Whether or not IP-enabled services ought to be regulated, and how they should be regulated, depends upon market structure considerations. We now have an opportunity to constructively rethink, revise and rationalize the states' and the FCC's regulatory authority including the jurisdictional separations process.

It remains the province of state Commission's to establish consumer protections that include service quality, regulation of services where appropriate, access to emergency services and numbering. The local exchange markets in Montana are at present and for at least residential customers best characterized as near monopoly markets and ILECs are regulated unless exempt by state law or policy. The standard suggested in the NPRM (¶ 74), that economic regulation was meant to apply to just "monopoly" providers only, is inconsistent with Montana's statutes. Few, if any, utilities in any industry are perfect monopolists, yet they are subject to economic service regulation by

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[9] BUSH PUSHES BROADBAND ROLLOUT BY 2007. By Caren Bohan ALBUQUERQUE, New Mexico, March 26, 2004 (Reuters) - President Bush on Friday proposed 2007 as the goal for universal availability of high-speed Internet access to keep America competitive and innovative.

state law. Therefore, it is incumbent upon state regulators to revise economic regulations if and when the conditions change.

Economic regulation in certain markets should continue due to the unknown market structure that will emerge with IP telephony, combined with the fact that the underlying providers of the infrastructure are near monopolists.

One ILEC in Montana intends to provide "stand-alone DSL."[10] Stand alone DSL is also a platform for Qwest's own IP-enabled telephony, a service that Qwest intends to offer free of access charges. The combination of these two services just might be a "killer application." Just because packet switch technology is substituted for circuit switched technology to provide the services similar to that offered by the same dominant provider is an unsound reason to abolish economic regulation. There may be other relevant advantages that accrue to the incumbent that include name recognition, scale economies and "first mover" advantages. As a result, the incumbent is going to have natural advantages over other suppliers of IP-enabled services. In turn, economic regulation of this kind of carrier in certain markets should not be preempted as it is a very prudent check on any possible anticompetitive behavior and state regulators are best able to provide that regulatory oversight.

Other Regulatory Requirements: Rural Considerations (¶¶ 75). Comment is sought on the impact on rural carriers. Most of these incumbent carriers are small having low density and high costs and are dependent on both federal universal service and carrier access charges for their economic health. In turn, these rural carrier's customers are dependent on such support in order to have reasonably comparable rates and services and at affordable rates. The small rural carriers in Montana have effectively deployed broadband services and they receive high cost support for the local infrastructure.

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[10] In the context of Qwest's 271 docket (D2000.5.70) the MPSC has expressed concern with how Qwest tied its offering of Megabit service to a consumer's subscription to Qwest's own voice service. Qwest's offering of "stand alone DSL" appears a response to that concern as well as a positive response to changing market conditions. See this Commission's January 11, 2002, Final Report on Emerging Services and subsequent reports such as the MPSC's Public Interest Report.